

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.21**WELDING WITNESS REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WWR-000007**Date Inspected:** 13-Nov-2006**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**Witness:** **Procedure Qualification Record**
Welding **NDT****Welder Qualification** **Fracture Critical**
Mechanical Testing, describe:Charpy-V Re-test**Index Lot #:** B72-047-06A**Witness Lot #:** B60-013-06**Bridge No:** 34-0006**Component:** N/A**Welder:** Lei Li Chao**ID #:** 053619**Joint Description:** Single V/w Backing

N/A

WPS ID #: PWPS B.T.2231FA

N/A

Base Metal: A709M 345

N/A

PQR ID #: HP-2006103 (Max)

N/A

Thickness: 26mm

N/A

Process: FCAW

N/A

Electrode Spec/Class: A5.20/E71T-1

N/A

Positions: 1G

N/A

Backing Material: A709M

N/A

CWI: Liu Liu

N/A

Average Amps: 354.6

N/A

AWS Code: AWS D1.5 (2002)

N/A

Average Volts: 35.7

N/A

Applicable Sec: 5.12 Max & 12

N/A

Travel Speed: 276.1mm/min

N/A

Heat Input: 2.75kilojoules/mm

N/A

Preheat: 122.9C

N/A

Summary of Items Observed:

: The Quality Assurance Inspector observed the re-test of the Charpy-V Notch impact tests. The tests do not appear to comply with the contract documents. The impact values for the five (5) specimen were: 36, 34, 86, 23 and 25 Joules at -30 degrees celsius. Since this is a retest, all of the impact tests, after discarding the highest and lowest, must meet a minimum of 34 Joules for FCM requirements.

Summary of Conversations:

: ZPMC intends to perform Charpy-V Notch at Non-Fracture Critical Temperatures to gain information on the mechanical properties.

Observed welding,testing or results: is in general conformance with the contract requirements.
is not in conformance with the contract requirements.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

WELDING WITNESS REPORT

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Inspected By: McClary,David

Quality Assurance Inspector

Reviewed By: Lowry,Patrick

QA Reviewer